

RESPIRABLE DUST SAMPLER ECOTECH MODEL AAS 217

BACKGROUND

High Volume Air Samplers remain workhorse for air quality monitoring. Modifications are done in basic HVS by incorporating a cyclone in the sampler which fractionates ambient air suspended particles into two fractions: one up to 10 microns which passes through the cyclone and is deposited on filter paper, while the other, above 10 microns, is removed by the cyclone and gets accumulated in the cup fitted at the bottom of the cyclone.

Ecotech developed RDS based on the concept and requirement given in the BIS 5182 (Part-23) 2006. Provision has been made in the RDS for fitting of Gaseous Pollutants Sampling Attachment.

Due to the provision of fitting of this attachment, AAS 217 has become a unique system using which one can sample simultaneously PM₁₀, SO₂, NO₂, NH₃ and O₃. Collected PM₁₀ dust can be analyzed for heavy metals (Ni, As and Pb) and Benzo(a)pyrene without compromising in a single dust sample collected on 8x10" glass micro fibre filter paper of AAS 217 as per recommended standard methods. Detailed literature on Gaseous Pollutants Sampling Attachment Ecotech AAS 109 can be referred for its specifications.



TECHNICAL FEATURES

In AAS 217, ambient air is sucked using a suction blower through corrosion-free aluminum modular pipe and passed through a sharp cutoff cyclone which divides the particulate matter into two fractions: one below 10 microns and another above 10 microns. The respirable dust (below 10 microns) is directly deposited on filter paper, and the coarser dust (above 10 microns) is collected in the cup fitted under the cyclone. A time totalizer records the total running time of the blower. The manometric system indicates the rate of flow in cubic meter per minute, which can be read directly on a calibrated scale.

SPECIFICATIONS :

Ref:	Meet requirements given in BIS 5182 (Part -23) 2006
Flow Rate :	0.8 – 1.2 m ³ /min free flow
Suction Pump	Carbon Brush Blower
Particle Size :	Particles of 10 microns & below collected on Filter Paper. Particles bigger than 10 microns collected in a separate sampling cup fitted under the cyclone.
Sampling Time :	Can be operated upto 24 hours on continuous basis
Sampling Time Record :	0 to 9999.99 hrs. Recorded on a Time Totalizer.
Particle Size	Separate provision for collection of Respirable and Non-respirable(less than and greater than 10 microns) size particles.
Body	The body of RDS is robust enough to withstand impacts and vibration in transportation it is made up of heavy Powder Coated Aluminium sheet.
Power requirement :	Nominal 220 V, Single Phase, 50Hz AC mains supply.
Size & Weight :	430 x 330 x 730mm., 32Kg
Connectivity	Provisions are existing in the RDS to attach or detach Gaseous Pollutants Sampling Attachment (AAS 109) in field.

WARRANTY

ALL ECOTECH PRODUCTS CARRY ONE YEAR WARRANTY



For pricing information and queries contact:

ECOTECH INSTRUMENTS

Manufacturer of Air Pollution Monitoring Instruments

K-127, UPSIDC Industrial Area, Site-V, Kasna, Greater Noida, (Uttar Pradesh)

Phone: 91-0120-2341127, 09810392043, **Fax:** 91-0120-2341128

Email: ecotechinstruments@gmail.com